

Mineral Industry Surveys

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COPPER IN MAY 2002

Although average daily mine production fell to a 15-year low in May, average daily primary refinery production rose slightly. Consumption of refined copper in May rose for the third consecutive month and was at the highest monthly level since March of 2001. Consumption of purchased copper-base scrap rose to the highest level since August of 2001, giving further evidence that demand for copper materials may be in a sustained recovery from the low levels reached at yearend 2001. According to data compiled by the American Bureau of Metal Statistics, Inc. (2002), U.S. apparent consumption of wire rod rose by 5% to 175,000 metric tons (t), the second consecutive monthly increase, and was at the highest level since October of 2001. Domestic shipments of wire rod rose by 3.4 %, and net imports rose by about 29%. Preliminary data for the first 5 months of 2002 still indicate a 6.5% year-onyear decline in apparent consumption. It is believed, however, that about 11,000 t of wire rod imported from Russia during the first 5 months of 2002 has been misclassified as copper rod (straight), and thus excluded from wire-rod apparent consumption. Subject to verification by the U.S. Census Bureau, inclusion of this material would further boost the recovery in wire-rod apparent consumption.

At the end of May, copper prices, which had been relatively stagnant over the preceding 3 months, responded to several industry announcements of production cutbacks. COMEX spot prices jumped to \$0.78 per pound during the first week of June, up from \$0.73 prior to the announcements. Though prices softened slightly by monthend, the June COMEX spot price averaged \$0.76, up from \$0.73 in May.

 BHP Billiton announced on May 28 that it would extend production constraints at its Escondida Mine in Chile and the temporary closure of sulfide operations at its Tintaya Mine in Peru. The initial cutbacks were implemented in November 2001 and were anticipated to reduce production by 170,000 t. The new announcement extends cutbacks at Escondida and Tintaya through the end of 2002 and will result in a total reduction in output of 250,000 t over the November 2001-December 2002 period. According to the company, the cutbacks were in response to global stock growth and limited growth in world demand (BHP Billiton, 2002).

• On June 4, Grupo Mexico S.A. de C.V. announced that it was closing its Cananea Mine copper facilities owing to a strike by its labor union. The closure affected both the mill and solvent extraction-electrowinning plant, which had a combined annual production rate of about 150,000 t. According to Grupo's public statement, the union's demand for a 16.3% wage hike was untenable because the mine was struggling to be viable in the current copper market (Platts Metals Week, 2002a). Before the mine could be fully closed, however, a settlement was reached (June 10) that called for a 5.25% pay raise. Despite the settlement, prices retained most of the gains initially attributed to Grupo's June 4 announcement (Platts Metals Week, 2002b).

References Cited

American Bureau of Metal Statistics, Inc., 2002, U.S. copper rod market—ABMS report 4: Chatham, NJ, American Bureau of Metal Statistics, Inc., July 26, 10 p.

BHP Billiton, 2002, BHP Billiton extends production cuts: London, BHP Billiton press release, May 28, 3 p.

Platts Metals Week, 2002a, Duration of Cananea closure key to market move: Platts Metals Week, v. 73. no. 23, June 10, p. 1, 5.

Platts Metals Week, 2002b, Grupo strike settlement has little impact: Platts Metals Week, v. 73, no. 24, June 17, p. 8.

${\bf TABLE~1}$ SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless otherwise specified)

		_		2002	
	Source				January -
	table 2/	2001 p/	April	May	May
Production:					
Primary:					
Mine, recoverable	(2)	1,340,000	94,800	91,600	471,000
Refinery:					
Electrolytic:					
Domestic	(4)	823,000	60,300	76,600	370,000
Foreign	(4)	185,000	10,100	W	W
Electrowon	(4)	628,000	50,600	49,900	250,000
Total	(4)	1,640,000	121,000	127,000	621,000
Secondary recoverable copper:					
Refineries	(5)	154,000	7,630	8,170	37,600
Ingot makers 3/	(5)	121,000	10,100	10,100	50,300
Brass and wire-rod mills	(5)	727,000	64,900	66,800	326,000
Foundries, etc. 3/	(5)	67,100	5,590	5,590	28,000
Smelter, total	(3)	947,000	67,900	70,600	339,000
Consumption:					
Apparent	(8)	2,500,000 r/	233,000	NA	NA
Refined (reported)	(7)	2,610,000	213,000	220,000	1,020,000
Purchased copper-base scrap	(9)	1,380,000	111,000	114,000	558,000
Stocks at end of period:					
Total refined	(11)	953,000 r/	1,070,000	1,050,000	XX
Blister, etc.	(11)	98,000	39,300	40,600	XX
Prices:					
U.S. producer cathode					
(cents per pound) 4/	(12)	76.854	76.966	77.378	76.671
Imports: 5/					
Ores and concentrates 6/	(14)	122,000	10,400	NA	NA
Refined	(14)	991,000	92,600	NA	NA
Exports: 5/		•	ŕ		
Ores and concentrates 6/	(15)	45,300	1,850	NA	NA
Refined	(15)	22,500	652	NA	NA

p/ Preliminary. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

^{1/} Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

^{2/} Numbers in parentheses refer to the detailed tables where these data are located.

^{3/} Monthly data and 2001 cumulative data estimated based on 2000 monthly average.

^{4/} Source: Platts Metals Week.

^{5/} Source: U.S. Census Bureau.

^{6/} Copper content.

${\bf TABLE~2}$ MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES 1/

(Metric tons)

	Rec	overable cop	per		Contained copper	
Period	Arizona	Others 2/	Total	Electrowon	Concentrates 3/	Total
2001: p/						
January - May	364,000 r/	210,000	574,000 r/	246,000	336,000	582,000
May	78,700	43,600	122,000	55,000	67,500	123,000
June	75,800	39,500	115,000	55,200	61,700	117,000
July	72,900	37,000	110,000	54,500	56,300	111,000
August	73,600	35,900	109,000	55,500	55,500	111,000
September	73,000	33,600	107,000	53,800	54,200	108,000
October	76,800	36,600	113,000	55,000	60,000	115,000
November	73,000	29,000	102,000	54,100	49,300	103,000
December	75,900	35,800	112,000	54,200	59,100	113,000
Year	885,000 r/	457,000 r/	1,340,000	628,000	732,000	1,360,000
2002:						
January	64,500 r/	28,600	93,100 r/	52,800	42,500	95,300
February	59,800	31,000	90,800	46,200	45,900	92,000
March	65,500	35,200	101,000	50,800	51,200	102,000
April	62,000	32,800	94,800	50,600	45,400	95,900
May	61,500	30,000	91,600	49,900	42,700	92,700
January - May	313,000	158,000	471,000	250,000	228,000	478,000

p/ Preliminary. r/ Revised.

- $1/\,\textsc{Data}$ are rounded to no more than three significant digits; may not add to totals shown.
- 2/ Includes production from Alaska, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.
- 3/ Includes copper content of precipitates and other metal concentrates.

TABLE 3
COPPER PRODUCED AT SMELTERS IN THE
UNITED STATES, BY SOURCE 1/2/

(Metric tons, copper content)

	Domestic and			
Period	foreign ores	Scrap	Total	
2001: p/				
January - May	W	W	413,000	
May	W	W	84,700	
June	W	W	80,200	
July	W	W	58,100	
August	W	W	71,100	
September	W	W	70,900	
October	W	W	86,300	
November	W	W	82,100	
December	W	W	85,800	
Year	W	W	947,000	
2002:				
January	W	W	70,000	
February	W	W	60,400	
March	W	W	70,100	
April	W	W	67,900	
May	W	W	70,600	
January - May	W	W	339,000	

p/ Preliminary. W Withheld to avoid disclosing company proprietary data included in "Total."

 $^{1/\}operatorname{Includes}$ blister, a node and black copper from primary or secondary sources.

 $^{2/\,\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

${\bf TABLE~4}$ PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

(Metric tons)

		Primary	materials			
	Electroly	rtic 2/				Total
Period	Domestic 3/	Foreign	Electrowon	Total	Scrap	refined
2001: p/	_					
January - May	363,000 r/	71,300	246,000 r/	681,000 r/	75,100	756,000 r
May	72,500	15,100	55,000	143,000	12,800	155,000
June	71,100	15,500	55,200	142,000	13,200	155,000
July	64,800	14,300	54,500	134,000	13,900	148,000
August	51,000	19,900	55,500	126,000	15,400	142,000
September	63,100	17,900	53,800	135,000	12,800	148,000
October	59,400	17,400	55,000	132,000	11,100	143,000
November	72,100	16,100	54,100	142,000	6,740	149,000
December	77,600	12,900	54,100	145,000	5,920	151,000
Year	823,000	185,000	628,000	1,640,000	154,000	1,790,000
2002:	_					
January	69,500	9,620	52,800	132,000	7,130	139,000
February	67,300	8,050	46,200	121,000	7,670	129,000
March	58,800	10,100	50,800	120,000	7,040	127,000
April	60,300	10,100	50,600	121,000	7,630	129,000
May	76,600	W	49,900	127,000	8,180	135,000
January - May	370,000	W	250,000	621,000	37,600	658,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Domestic."

 ${\it TABLE~5}$ COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, copper content)

	Refine	ries 2/	Ingot ma	akers 3/	Brass wire-ro	s and od mills	Foundrie	es, etc. 3/	
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total 4/
2001: p/	_								
January - May r/	14,400	60,700	12,500	37,800	306,000	9,500	6,130	21,800	468,000
May	2,240	10,500	2,490	7,560	60,400	297	1,230	4,360	89,100
June	2,730	10,500	2,490	7,560	57,300	1,060	1,230	4,360	87,200
July	3,470	10,400	2,490	7,560	52,000	969	1,230	4,360	82,500
August	4,340	11,000	2,490	7,560	57,300	1,790	1,230	4,360	90,100
September	3,130	9,700	2,490	7,560	56,100	1,140	1,230	4,360	85,700
October	3,720	7,420	2,490	7,560	62,500	1,790	1,230	4,360	91,100
November	2,230	4,510	2,490	7,560	57,800	1,640	1,230	4,360	81,800
December	1,840	4,080	2,490	7,560	58,500	1,880	1,230	4,360	82,000
Year	35,800	118,000	29,900	90,700	707,000	19,800	14,700	52,400	1,070,000
2002:									
January	3,110	4,020	2,490	7,560	60,500	1,790	1,230	4,360	85,000
February	3,350	4,310	2,490	7,560	62,600	1,820	1,230	4,360	87,800
March	2,910	4,130	2,490	7,560	65,400	1,770	1,230	4,360	89,800
April	3,300	4,330	2,490	7,560	64,000	904	1,230	4,360	88,100
May	3,710	4,470	2,490	7,560	64,900	1,840	1,230	4,360	90,600
January - May	16,400	21,200	12,500	37,800	317,000	8,120	6,130	21,800	441,000

p/ Preliminary. r/ Revised.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Based on source of material at smelter level.

^{3/} Includes fire-refined copper.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Electrolytically refined and fire-refined scrap based on source of material at smelter level.

^{3/} Monthly data and 2001 cumulative data estimated based on 2000 annual data.

^{4/} Does not include an estimate, based on reported 2000 data, of 3,790 tons per month from new scrap and 2,380 tons per month from old scrap of copper recovered from scrap other than copper-base.

 ${\bf TABLE~6}$ PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

	Proc	luction	Ship	ments	Stocks, end of period	
Period	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2001: p/						
January - May	634,000 r/	794,000	632,000 r/	794,000 r	/ XX	XX
May	124,000	152,000	125,000	154,000	54,200	30,000
June	123,000	150,000	127,000	150,000	50,200	30,300
July	107,000	158,000	107,000	156,000	50,100	30,100
August	128,000	163,000	128,000	163,000	49,700	30,000
September	122,000	158,000	121,000	159,000	50,800	28,800
October	124,000	164,000	123,000	165,000	52,000	25,700
November	116,000	157,000	117,000	155,000	52,300	27,700
December	113,000	139,000	111,000	140,000	53,600	25,800
Year	1,470,000	1,880,000	1,470,000	1,880,000	XX	XX
2002:						
January	123,000	143,000	125,000	143,000	49,500	25,600
February	122,000	139,000	123,000	135,000	48,500	28,900
March	131,000	148,000	130,000	147,000	48,900	29,200
April	130,000	155,000	130,000	157,000	48,800	26,500
May	133,000	154,000	133,000	155,000	48,700	25,400
January - May	638,000	739,000	642,000	737,000	XX	XX

p/ Preliminary. r/ Revised. XX Not applicable.

TABLE 7
CONSUMPTION OF REFINED COPPER 1/

(Metric tons)

Wire-rod	Brass	Other	
mills	mills	plants 2/	Total
845,000	289,000	26,100	1,160,000
156,000	55,800	5,220	217,000
157,000	54,900	5,220	217,000
161,000	44,900	5,220	211,000
160,000	53,100	5,220	218,000
155,000	47,400	5,220	208,000
164,000	46,600	5,220	216,000
151,000	45,700	5,220	202,000
135,000	41,800	5,220	182,000
1,930,000	623,000	62,600	2,610,000
140,000	46,600	5,220	192,000
138,000	47,500	5,220	191,000
147,000	51,400	5,220	204,000
156,000	51,400	5,220	213,000
155,000	40,200	1,210	196,000
		W	W
	1,540	1,760	3,290
981	W	W	981
	17,700	2,250	19,900
156,000	59,400	5,220	220,000
737,000	256,000	26,100	1,020,000
	mills 845,000 156,000 157,000 161,000 160,000 155,000 164,000 135,000 1,930,000 140,000 138,000 147,000 156,000 981 156,000	mills mills 845,000 289,000 156,000 55,800 157,000 54,900 161,000 44,900 160,000 53,100 155,000 47,400 164,000 46,600 151,000 45,700 135,000 41,800 1,930,000 623,000 140,000 46,600 138,000 47,500 147,000 51,400 155,000 40,200 1,540 981 W 17,700 156,000 59,400 737,000 256,000	mills mills plants 2/ 845,000 289,000 26,100 156,000 55,800 5,220 157,000 54,900 5,220 161,000 44,900 5,220 160,000 53,100 5,220 155,000 47,400 5,220 151,000 45,700 5,220 135,000 41,800 5,220 133,000 41,800 5,220 138,000 47,500 5,220 147,000 51,400 5,220 156,000 51,400 5,220 155,000 40,200 1,210 W 1,540 1,760 981 W W 17,700 2,250 156,000 59,400 5,220

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Billets and other." -- Zero.

 $^{1/\,\}textsc{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2000 annual data.

TABLE 8 U.S. APPARENT CONSUMPTION OF COPPER 1/

(Metric tons)

	Refined copper	Copper in	Refined general	Refined	Stock change	Apparent
Period	production	old scrap 2/	imports 3/	exports 3/	during period	consumption
2001: p/	production	olu scrap 2/	illiports 3/	exports 3/	during period	Consumption
		117.000	/ 410,000	0.020	170,000 /	007.000
January - April	538,000 r/	117,000 r	,	8,020	170,000 r/	897,000 r/
April	134,000	27,000	107,000	1,890	70,600	195,000
May	143,000	25,400	72,400	1,020	13,400 r/	226,000
June	142,000	26,100	89,000	815	46,200	210,000
July	134,000	25,900	95,800	1,650	109,000	145,000
August	127,000	27,300	80,900	2,590	30,700	202,000
September	135,000	25,400	114,000	1,190	88,800	184,000
October	132,000	23,800	78,600	4,630	35,300	194,000
November	142,000	20,700	148,000	5,290	68,500	237,000
December	144,000	20,500	101,000	571	56,200	208,000
Year	1,640,000	312,000	1,200,000	25,800	618,000	2,500,000 r/
2002:						
January	132,000 r/	20,300	134,000	393	50,700	235,000 r/
February	121,000 r/	20,700	113,000	699	27,400	227,000 r/
March	120,000	20,400	64,300	3,150	22,900	178,000
April	121,000	19,800	105,000	652	12,800 r/	233,000
May	127,000	20,800	NA	NA	(12,700)	NA
January - April	494,000	81,200	417,000	4,900	114,000	874,000

p/ Preliminary. r/ Revised. NA Not available.

TABLE 9 CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, gross weight)

	Smelt	ers			Brass	and			
	and refineries		Ingot mal	Ingot makers 2/		wire-rod mills 3/		Foundries, etc. 2/	
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
2001: p/									
January - May	28,400 r/	76,600 r/	18,300 r/	52,100 r/	389,000 r/	9,830	10,900 r/	23,700 r/	609,000 r/
May	3,400	17,400	3,670	10,400	77,500	338	2,180	4,740	120,000
June	3,400	16,200	3,670	10,400	73,300	1,120	2,180	4,740	115,000
July	3,590	16,500	3,670	10,400	65,700	1,010	2,180	4,740	108,000
August	4,270	18,000	3,670	10,400	73,000	1,840	2,180	4,740	118,000
September	3,730	16,200	3,670	10,400	71,200	1,190	2,180	4,740	113,000
October	3,990	6,220	3,670	10,400	79,200	1,840	2,180	4,740	112,000
November	3,660	4,880	3,670	10,400	73,100	1,660	2,180	4,740	104,000
December	3,610	3,660	3,670	10,400	75,000 r/	1,930	2,180	4,740	105,000 r/
Year	54,600	158,000	44,000	125,000	899,000 r/	20,400	26,200	56,800	1,380,000
2002:									
January	3,530	4,100	3,670	10,400	76,600	1,840	2,180	4,740	107,000
February	4,120	4,840	3,670	10,400	79,100	1,880	2,180	4,740	111,000
March	3,940	4,450	3,670	10,400	82,700	1,830	2,180	4,740	114,000
April	4,160	4,760	3,670	10,400	80,600	951	2,180	4,740	111,000
May	4,290	5,200	3,670	10,400	81,800	1,900	2,180	4,740	114,000
January - May	20,000	23,400	18,300	52,100	401,000	8,390	10,900	23,700	558,000

p/ Preliminary. r/ Revised.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2000 data.

^{3/} Source: U.S. Census Bureau.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Monthly data and 2001 cumulative data estimated from 2000 annual data.

^{3/} Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10 CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/2/

(Metric tons, gross weight)

	2001 p/			2002				
Scrap type and processor	January - May	Year	March	April	May	January - May		
No. 1 wire and heavy:								
Smelters and refiners	- 30,800 r/	73,300	5,350	5,900	6,210	27,600		
Brass and wire-rod mills	172,000 r/	395,000	36,500	35,000	36,700	177,000		
No. 2 mixed heavy and light:								
Smelters and refiners	58,500 r/	120,000	6,140	6,120	6,380	31,300		
Brass and wire-rod mills	2,800	5,340	264	312	312	1,390		
Total unalloyed scrap:								
Smelters and refiners	89,300 r/	194,000	11,500	12,000	12,600	58,900		
Brass and wire-rod mills	175,000 r/	400,000	36,800	35,300	37,000	179,000		
Red brass: 3/	-							
All plants	28,000 r/	60,700	4,530	4,680	4,860	22,600		
Leaded yellow brass:		ĺ	ŕ	•		ŕ		
All plants	155,000 r/	353,000	31,800	30,000	31,100	152,000		
Yellow and low brass:								
All plants	- 45,400 r/	110,000	9,230	9,350	9,190	46,200		
Cartridge cases and brass:	_							
Smelters and refiners	- W	W	W	W	W	W		
Brass mills	- 14,500 r/	35,500	4,160	4,120	3,840	20,000		
Auto radiators:	_							
Smelters and refiners	21,400 r/	47,500	3,490	3,490	3,490	17,400		
Bronzes:	_							
Smelters and refiners	5,340 r/	11,700	912	912	912	4,560		
Brass mills	3,490 r/	8,300	931	941	933	4,720		
Nickel-copper alloys:	_							
All plants	9,500 r/	18,700	1,550	1,590	1,300	7,770		
Low grade and residues:	_							
Smelters and refiners	25,900 r/	50,000	1,110	1,110	1,110	5,560		
Other alloy scrap: 4/	_							
Smelters and refiners 5/	4,820 r/	9,010	138	138	138	690		
Brass mills	2,350 r/	5,570	550	550	550	2,750		
Total alloyed scrap:								
Smelters and refiners	91,500 r/	192,000	10,700	10,700	10,700	53,500		
Brass mills	224,000 r/	518,000	47,700	46,200	46,700	230,000		
Total scrap:						•		
Smelters and refiners	181,000 r/	385,000	22,200	22,700	23,300	112,000		
Brass and wire-rod mills	399,000 r/	919,000	84,500	81,500	83,700	409,000		

p/Preliminary. r/Revised. W Withheld to avoid disclosing company proprietary data; included in "Other alloy scrap: Smelters and refiners."

^{1/} Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 6,920 tons of scrap per month in 2000; monthly data include estimates of about 15,500 tons of scrap per month consumed by ingot makers and several smelters that report on an annual basis.

^{2/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{3/} Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

^{4/} Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

^{5/} Includes items indicated by symbol W.

TABLE 11 COPPER STOCKS AT END OF PERIOD 1/

(Metric tons)

			Refined copper						
	Crude		Wire rod					Total	
Period	copper 2/	Refineries 3/	mills 3/	Brass mills 3/	Other 4/	Comex 5/	LME 6/	refined	
2001: p/									
May	98,100	28,100 r/	27,300	22,300	4,680	137,000	298,000	518,000 1	
June	92,500	26,600 r/	30,200	20,200	4,680	150,000	333,000	564,000	
July	89,500	20,000 r/	30,800	22,700	4,680	160,000	435,000	673,000	
August	93,100	18,500 r/	28,900	23,100	4,680	170,000	459,000	704,000 1	
September	88,100	17,700	28,200	21,100	4,680	181,000	540,000	793,000	
October	105,000	19,600 r/	25,700	20,100	4,680	191,000	566,000	828,000	
November	88,500	24,600 r/	26,600	24,700	4,680	215,000	601,000	896,000	
December	98,000	28,900 r/	32,900	25,500	4,680	244,000	617,000	953,000 1	
2002:									
January	71,200	28,200	33,100	25,000	4,680	258,000	654,000	1,000,000	
February	66,100	28,700	14,100	25,100	4,680	275,000	683,000	1,030,000	
March	44,000	22,100	15,100	23,700	4,680	284,000	704,000	1,050,000	
April	39,300	16,600	20,300	22,300	4,680	296,000	707,000	1,070,000	
May	40,600	14,600	19,200	20,500	4,680	304,000	691,000	1,050,000	

p/ Preliminary. r/ Revised.

- 1/ Data are rounded to no more than three significant digits; may not add to totals shown.
- 2/ Copper content of blister and other materials in transit and in process of refining.
- 3/ Stocks of refined copper as reported; no estimates are made for nonrespondents.
- 4/ Monthly estimates based on reported and 2000 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.
- 5/ Commodity Exchange Inc., New York.
- 6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12
AVERAGE PRICE OF COPPER IN THE UNITED STATES AND
ON THE LONDON METAL EXCHANGE

(Cents per pound)

	U.S. producers	Comex	LME	
	delivered price	first	cash price	
Period	cathode 1/	position 2/	Grade A	
2001:				
May	81.166	76.848	76.288	
June	75.501	72.573	72.943	
July	72.261	69.438	69.166	
August	71.559	67.341	66.407	
September	69.628	65.428	64.682	
October	67.422	63.204	62.460	
November	70.560	66.093	64.747	
December	72.050	67.832	66.740	
Year	76.854	72.567	71.574	
2002:	•			
January	73.944	69.786	68.202	
February	76.384	72.226	70.831	
March	78.683	74.525	72.779	
April	76.966	73.107	72.118	
May	77.378	73.220	72.362	
January - May	76.671	72.573	71.258	

^{1/} Listed as "U.S. producer cathode."

Sources: Platts Metals Week and American Metal Market.

^{2/} Listed as "Comex high grade first position."

TABLE 13 NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

			Dealers (New York)		
			Red bras		
	Brass mills	Refiners	No. 2	turnings and	
Month	No. 1 scrap	No. 2 scrap	scrap	borings	
2001:	_				
May	72.82	61.95	51.86	42.00	
June	68.29	57.99	51.52	42.00	
July	66.46	57.50	50.00	42.00	
August	64.33	55.37	46.00	39.00	
September	63.39	54.46	46.00	40.00	
October	61.39	52.78	44.48	38.39	
November	63.45	53.82	40.09	37.09	
December	65.87	54.47	41.47	37.00	
Year	69.62	58.96	48.76	40.63	
2002:	_				
January	67.36	55.62	41.19	38.10	
February	69.42	57.29	43.00	37.00	
March	72.24	59.76	43.00	39.00	
April	71.82	54.00	44.00	38.91	
May	71.98	60.39	44.00	37.00	
January - May	70.56	57.41	43.04	38.00	

Source: American Metal Market.

 ${\it TABLE~14} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~COPPER~(UNMANUFACTURED),~BY~CLASS~1/}$

(Metric tons, copper content)

	Ore an	d concent	rate	Matte, ash and precipitates			Bliste	er and anod	es	Refined			
		20	02		20	02		20	02		20	002	
Country or			January -		January -			January -				January -	
territory	2001	April	April	2001	April April		2001	April	April	2001	April	April	
Brazil						-				12,000	4,000	17,000	
Canada	7,210		4,320	43	11	75	79,700	6,370	27,400	270,000	23,100	110,000	
Chile	51,800		37,800				87,700		8,070	174,000	11,500	63,900	
Indonesia	20,000												
Italy							12,200						
Japan				(2/)						8,660	854	2,570	
Kazakhstan										82,400		2,060	
Mexico	2,550			317			48,900	1,010	3,030	131,000	4,180	20,200	
Namibia							6,840		2,850				
Peru	40,200	10,400	10,400				22,600	4,730	4,730	280,000	46,700	91,600	
Philippines							4,990			999			
Russia							115			22,800	53	2,220	
Spain							4,420						
Taiwan				560	29	185				34			
Turkey			10,000										
Other		2	2	25	2	2	3,510	(2/)	1	8,790	2,180	6,010	
Total	122,000	10,400	62,600	945	42	262	271,000	12,100	46,100	991,000	92,600	316,000	

⁻⁻ Zero.

2/ Less than 1/2 unit.

Source: U.S. Census Bureau.

 $^{1/\,\}text{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

TABLE 15 U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

	Ore ar	and concentrate		Matte, ash and precipitates			Blister	r and ano	des	Refined		
	2002		2002				2002			2002		
Country or		January -			J	anuary -	•	January -			January -	
territory	2001	April	April	2001	April	April	2001	April	April	2001	April	April
Belgium	18		21				1,550		179	30		
Canada	30,300	1,460	6,170	6,860	152	846	13,800	1,700	6,510	6,520	436	1,240
China	2,310	91	550	3	1	1	87		46	8,520	1	6
Egypt							2			2,160		2,200
France	1			64			2,130		40	62	28	28
Germany	443		7	50		35	982	20	40	169		23
Hong Kong	87	1	8	2		103	2,470	156	890	2,330		31
India	8			261		152	125	3	20		117	232
Israel	836			18			65	2	8	6		2
Italy	20						376	29	90	27		
Japan	19	6	16	8	16	1,180	216		20	460		2
Korea, Republic of	699	17	187	1,090		5	1,320	36	226	78	19	332
Mexico	9,130	255	2,230	15,300	521	4,460	22	8	17	821	31	48
Singapore	159		60	(2/)		(2/)	407	40	160	14		
Taiwan	347		4	50	(2/)	42	1,130	60	399	146		22
Thailand	22	3	3				264		70			
United Kingdom	280		(2/)	49			451	24	145	457		438
Venezuela	501						5		6	140		205
Vietnam							120					
Other	143	22	49	144	5	17	524 r/	72	211	576	20	89
Total	45,300	1,850	9,300	23,900	695	6,840	26,000	2,150	9,080	22,500	652	4,900

r/ Revised. -- Zero.

Source: U.S. Census Bureau.

 $^{1/\,\}text{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Less than 1/2 unit.

TABLE 16 U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

		Imports							Exports					
	Unalloyed			Alloyed			Unalloyed			Alloyed				
	_	2002		2002			2002				2002			
Country or	_		January -	-		January -	•	January -		•	Ĵ	January -		
territory	2001	April	April	2001	April	April	2001	April	April	2001	April	April		
Belgium				388			1,260	151	599	1,470	436	2,090		
Canada	10,600	1,180	4,460	45,800	3,440	12,200	38,700	1,350	6,400	33,100	2,150	9,130		
China	41			15	87	239	156,000	9,830	37,600	136,000	11,200	40,900		
Colombia				899	2	134				18		2		
Costa Rica	868	73	373	635	47	152				3		2		
Dominican Republic	1,550	112	533	1,570	91	342								
France				188	11	51	11	327	823	59	195	215		
Germany	27			62	17	17	6,500	1,650	6,160	9,480	1,770	6,230		
Guatemala	499	69	216	1,990	100	390								
Honduras	484	14	43	656	29	78								
Hong Kong							4,300	854	2,930	5,440	719	2,420		
India							2,770	374	1,290	33,400	4,710	16,800		
Italy	309		77				117		23	143	19	19		
Jamaica	283	34	136	470	42	163								
Japan	169	7	23			13	13,800	694	3,550	13,200	897	3,010		
Korea, Republic of			19	20	21	21	24,400	756	5,460	17,800	1,560	7,420		
Mexico	13,500	914	2,880	24,000	1,720	5,930	2,760	170	689	4,370	24	67		
Netherlands				20		354	109			963	17	287		
Nicaragua	276	25	172	54	8	18								
Panama	161	25	109	804	69	332						79		
Peru	347			112										
Spain				47		(2/)	549		18	2,710	213	1,430		
Switzerland				45			596		20	3,720	174	877		
Taiwan		15	15	554	56	152	9,120	823	3,480	5,870	828	2,350		
United Kingdom	64		27	919	155	521	36			570	9	140		
Venezuela	42	7	39	874	180	440								
Other	992 r/	62	230	4,250 r/	189	732	868 r/	157	607	3,500 r/	288	847		
Total	30,300	2,540	9,350	84,400	6,260	22,300	262,000	17,100	69,700	272,000	25,200	94,300		

r/ Revised. -- Zero.

Source: U.S. Census Bureau.

 $^{1/\,\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Less than 1/2 unit.